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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,578	08/18/2003	Nicholas Leventis	423.019US1	3949

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EXAMINER
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COONEY, JOHN M

ART UNIT	PAPER NUMBER
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1711

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	03/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/643,578

Applicant(s)

LEVENTIS ET AL.

Examiner

John m. Cooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-23,25-31,36-64,66,67,69 and 70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-5,7-23,25-31,36-64,66,67,69 and 70 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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Applicants' reply and papers received by 1-18-07 are noted. However, upon closer review and consideration of the instant invention, record, and claims as they currently stand, the following restriction and election requirements are held to be necessary. Applicants' papers and replies will be addressed upon applicants' response to the following requirements:

***Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-5, 7-22, 66, and 67, drawn to method of forming article, classified in class 501, subclass 12.
- II. Claims 23, 25-31, 36-42, 47-49, 69, and 70 drawn to porous cross-linked product, classified in class 252, subclass 62.
- III. Claim 43, drawn to process of linking an attached group, classified in class 427, subclass 220.
- IV. Claims 44-46, drawn to electrical articles, classified in class 377, subclass 27.
- V. Claims 50-64, drawn to process of treating, classified in class 516, subclass 101.

The inventions are distinct, each from the other because of the following reasons:

Inventions II. and I. are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the

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process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as simultaneous in situ formation and cross-linking of the formed product.

Inventions II. and IV. are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is deemed to be useful as a spacer sheet and the inventions are deemed patentably distinct because there is nothing on this record to show them to be obvious variants.

Inventions II. and III. & V. are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the product as claimed can be used in a materially different process of using that product, such as granulating and employing it as a filler material.

Inventions III. and V. are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs,

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modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are directed towards unrelated treatment operations having different designs, modes of operation, and effects.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

### ***Elections***

This application contains claims directed to the following patentably distinct species:

- 1.) The oxides of applicants' claims.
- 2.) The crosslinking agents of applicants' claims.
- 3.) The attached group of applicants' claims (beginning claim 4).
- 4.) The solvents of applicants' claims.
- 5.) The drying operations of applicants' invention.
- 6.) The new solvent of applicants' claims (beginning in claim 50).

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The species are independent or distinct because the groups are composed of compounds/materials and/or operations having diverse and distinctive structural make-ups and/or modes of operation.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, (1.) for group 1., claims 1-5, 7-23, 25-31, 36-64, 66, 67, and 69-70 are generic. Currently, (2.) for group 2., claims 1,4-5, 7-17, 20-23, 25-31, 36, 39-64, 66, 67, and 69-70 are generic. Currently, (3.) for group 3., claims 1-4, 7-23, 25-31, 36-64, 66, 67, and 69-70 are generic. Currently, (4.) for group 4., claims 1-5, 7-8, 13-15,18-23, 25-31, 36-64, 66, 67, and 69-70 are generic. Currently, (5.) for group 5., claims 1-5, 7-19, 23, 25-31, 36-49, 66, 67, and 69-70 are generic. Currently, (6.) for group 6., claims 1-5, 7-23, 25-31, 36-61, 66, 67, and 69-70 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations

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of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Observations***

The following observations are made in order to facilitate applicants' response and address of the claims as they stand:

- A.) There is unclarity in applicants' claims 13,14, and 36 in that it is not clear whether these claims are further defining the silicone oxide based sol-gel material or both the metal oxide or silicone oxide sol-gel material. These claims have been treated as generic for the relevant election requirements.
- B.) There are concerns as to how claims 39-42, and 69-70 further define the invention of claim 25.
- C.) There are concerns as to how claims 66 and 67 further define the invention of claim 1.
- D.) Claims 43, and 50-64 are improper and need to either be drafted as new method and/or product claims, or be drafted to properly be further limiting the process which they depend.
- E.) Claims to final products having no specific structural features have not been restricted. However, restriction may need to be considered if distinctness based on end use is placed into these claims.
- F.) There is conflict between the isocyanates and diisocyanate cross-linking agents as defined in the claims and care should be taken in selecting only ones species of




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cross-linking agent in addressing the election requirement and identifying claims which read on said elected species.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY JR.  
PRIMARY EXAMINER  
Group 1700